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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,016	05/31/2001	Jan A. Frohman		8213

7590 09/09/2003

Turan P. Odabasi  
Special Assistant General Counsel  
University of Nebraska  
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Lincoln, NE 68583-0745

EXAMINER

MULLEN, THOMAS J

ART UNIT PAPER NUMBER

2632

DATE MAILED: 09/09/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

*Remailing of 12/19/02 O. A.*



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# Office Action Summary

Application No.  
**09/871,016**

Applicant(s)  
**Frohman**

Examiner  
**Thomas J. Mullen**

Art Unit  
**2632**



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on May 31, 2001 is/are a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other:

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1. The drawings are objected to because block 22 in Figs. 4-6 lacks a "descriptive legend" in accordance with 37 CFR 1.84(o).

2. The disclosure is objected to because of the following informalities:

on page 3, line 8, it appears that "FIG. 3" should be --FIG. 7--;

on page 4, line 20, "tuning" should be --turning--; and

on page 5, line 5, it appears that "into" is redundant in view of the term "through" on line 4 (i.e. "through" is a preposition that relates the term "opening" on line 4 to both of the terms "inserted" and "removed" on line 5).

Appropriate correction is required.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 13-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 13, the recitation of "an article adapted to be worn on a user's hand" (line 2) is indefinite since it is unclear how this recitation relates to either the preamble ("sound generating device") or any of the subsequent limitations of the claim (which define the sound generating device). In other words, while the portion of the claim after line 2 (i.e., lines 3-7) independently defines a "sound generating device" consistent with the preamble (line 1), it is not apparent how the hand-worn "article" defined on line 2 is intended to further modify the "sound generating device" defined on lines 3-7.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 4, 7, 10, 13, 17 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Crow.

Crow discloses a "cheer simulator" adapted to be worn on a user's hand (note the "pistol grip" configuration of Figs. 1-2, which is "worn" in the sense that at least part of the hand is inserted into at least part of the housing, i.e. the finger inserted into the trigger opening), for the purpose of "express(ing) identifiable outcry and clamorous support for (a) team" (Abstract), comprising housing/article 10; electronic assembly (Fig. 4 or Fig. 5) which is "attached to" and/or "contained within" the article; sound generating means 28, i.e. for generating "humanly recognizable, audible mascot sounds" (col. 3, lines 58-59); and actuating means 14. It is inherent that the apparatus also "allow(s) the user to...de-actuate" the generating means 28, i.e. the user can "allow" the generating means to de-actuate after one cycle of operation (e.g. "the growl of a bear"--col. 4, line 6) unless the user retriggers the actuating means 14; alternately, of course, the user can "de-actuate" the sound generator by removing battery 12. It is further inherent that the generated sound--in the context of supporting a team at a sporting event--may be considered to be "associated with showing approval or disapproval of an event".

Regarding claims 4 and 10, note in Fig. 4 or Fig. 5 power source 12; electronic circuit 16 (i.e. a ROM circuit having digital memory 18) for storing a prerecorded sound (col. 3, lines 37-39 and 61-64); and audio speaker 28.

Regarding claim 17, the sounds emitted by speaker 28 are clearly "associated with an athletic event". Regarding claim 18, Crow further teaches a "selection structure" (toggle switch 15, see Fig. 4 and col. 4, lines 15-20) for selecting from a variety of sounds.

7. Claims 1-2, 7-8, 13, 16 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Chung-Piao.

Note in Chung-Piao, article 1 which is a “glove body”; electronic assembly 4 which is “attached to” and/or “contained within” the article (note substrate sheet 11); sound generator 3; and actuator/de-actuator means 6 (note col. 2, lines 58-62). The alarm sound generated by sound generator 3 in Chung-Piao inherently shows “disapproval” of an event (e.g. the threatening approach of an assailant).

Regarding claim 16, the actuator means 6 can be a type of “on/off switch” as discussed at col. 2, lines 58-62 (referred to above).

Regarding claim 18, Chung-Piao discusses at col. 3, lines 29-35 a “selection structure” (two switches, both designated 6 in Fig. 4) for selecting from a variety of sounds.

8. Claims 1, 5, 7, 11, 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Cranford et al.

Cranford et al discloses a sound generating apparatus 10, comprising an article 11 adapted to be worn on a user’s hand (note the “pistol grip” configuration of Figs. 1-4, which is “worn” in the sense that at least part of the hand is inserted into at least part of the housing, i.e. the fingers inserted into the openings 15-17); electronic assembly (Fig. 10 or Fig. 11) which is “attached to” and/or “contained within” the article; sound generating means 21,22; and actuating means 20. It is inherent that the apparatus also “allow(s) the user to...de-actuate” the generating means 21,22, i.e. the user can “allow” the generating means to de-actuate after one cycle of operation (a predetermined time interval--col. 4, lines 60-62) unless the user retriggers the actuating means 20; alternately, of course, the user can “de-actuate” the sound generator by removing battery 30. It is further inherent that the generated sound--in the context of “discourag(ing) an attacker” (Abstract)--may be considered to be “associated with showing... disapproval of an event”.

Regarding claims 5, 11 and 14, the actuating means may further include a "shock sensor" (col. 5, lines 1-8).

9. Claims 1, 3, 7, 9, 13 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Halperin.

Note in Halperin, article 20 which is an "elongated strap"; electronic assembly (Fig. 3) which is "attached to" and/or "contained within" the article (note housing 12); sound generator 34; and actuator/de-actuator means 14,16 (note col. 2, lines 4-24). The alarm sound generated by sound generator 34 in Halperin inherently shows "disapproval" of an event (e.g. the threatening approach of an assailant).

Regarding claim 16, the actuator means 16 is essentially an "on/off switch".

10. Claims 13 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Hiraki.

Note in Hiraki, article 12 which is worn on a user's hand; electronic assembly (Fig. 6, particularly alarm circuit 60 and annunciator 62) which is capable of emitting sounds (at 26, Fig. 3) inherently showing "disapproval" of an event (e.g. the threatening approach of an assailant); and actuator (56,58 in Fig. 6) connected to the assembly for "energizing" the assembly to result in emitting of sound (see col. 3, lines 31-37).

Regarding claim 16, the actuator further includes an on/off switch 66.

Regarding claim 19, the "actuator" (56,58) receives an initiating signal from an element 44 secured to the article 12, which element is mounted in the palm of the hand and is actuated by depressing an element 20; thus, it is inherent that the actuator (56,58) will "operate in response to the clapping motion of hands", i.e. if the wearer claps his hands the element 20 will be depressed to cause element 44 to send a signal to the "actuator" (56,58), which then energizes the electronic assembly (60,62).

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 4 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chung-Piao.

Note further in Chung-Piao, power source 5 and electronic circuit 4 which stores a prerecorded sound (col. 2, lines 24-29). The sound generator 3 is described as a "buzzer" but Chung-Piao further teaches that "(t)he number, structure, kinds, positioning and shapes of the... buzzers 3...are not limited" to the disclosed type (col. 2, lines 19-21). Thus, a wide variety of sound generator devices, many of which (including those using an "audio speaker") are notoriously old and well known in the art, may be used in the Chung-Piao device. Therefore, it would have been obvious for the sound generator in Chung-Piao to include an "audio speaker".

13. Claims 6, 12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cranford et al.

While Cranford et al provides a general teaching of using a "shock sensor" to monitor the situation where "a sharp blow or jolt" is imposed on the device when "an attacker...strike(s) the hand" of the wearer, a variety of sensor types are notoriously well known in the art for monitoring this type of condition, i.e. sensors that can detect sudden "accelerations" or "decelerations" of an alarm device or the body part to which it is attached. Therefore, it would have been obvious to use an "accelerometer" either to serve as the shock sensor itself or in place of the shock sensor, in the device of Cranford et al.



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14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom Mullen whose telephone number is (703) 305-4382. The examiner can normally be reached on Mon-Thur from 6:30AM to 4:00PM. The examiner can also be reached on alternate Fridays (6:30-3:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's acting supervisor, Daniel Wu, can be reached on (703) 308-6730.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

**Any response to this action should be mailed to:**

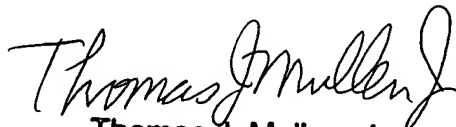
Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

(703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

T. Mullen  
December 17, 2002

  
Thomas J. Mullen, Jr.  
Primary Examiner  
Art Unit 2632